

REMARKS

Claim Rejections - 35 USC §102

All of the pending claims stand rejected as being anticipated under §102 by both Reece and Squibbs independently. However, as neither of the two references admittedly disclose all of the elements of the claims, the Examiner therefore relies on inherent disclosure asserted to be present in both Reece and Squibbs.

The rejection of all of the pending claims relies upon the Examiner's assertion that "in order for a cellular telephone to operate the phone must establish a connection between the transmission tower and the phone's transceiver. Such a connection requires that the phone determine its location in order to select the proper transmission tower." Office action at page 2.

It is respectfully asserted that this is not the case and that neither Reece nor Squibbs explicitly or inherently discloses all of the limitations of the pending claims for two principle reasons.

Firstly, there is no evidence found within in the references that a cellular phone available before the priority date of the application was functional to determine its location as part of normal operation of the cellular telephone. It is kindly asserted that such an assertion is not supported by the references and was not a standard function of cellular telephones before the Sep. 18, 2000 priority date of the present application.

To the contrary of supporting this assertion, the references the Examiner relies on in support of this assertion indicate that such a function is not an inherent function in a cellular telephone.

In support of this assertion the Examiner provides a list of issued patents that purportedly prove such a point, without pointing to any specific portion of any of the references. The list of patents given in support of this proposition includes: Ali, Bruno et al, Carlsson et. al., Maloney et al., Myers et al. and Rantalainen et al.

For example, the Bruno et. al patent, No. 6,538,601 with a filing date of June 15, 2001 (after the Sep, 18, 2000 priority date of the present application) describes a device with both a cellular transceiver and a GPS system. The GPS system is used to determine the location, and improvements to compensate for shortcomings of the GPS system in

determining location are taught. It is submitted that if the cellular transceiver was inherently capable of determining its location, then a GPS location determination system and improvements thereto would not be needed or sensical. According to the position espoused by the Examiner, the device of Bruno would inherently determine its position, and therefore the GPS and the location determination system associated with it would be completely redundant. Likewise, any teachings of using the cellular (GSM) network receiver to address shortcomings in the GPS location determination would not be necessary if the location determination was in inherent function of the cellular (GSM) network receiver.

A mobile unit includes a network receiver, such as a GSM telephone, for communication with a wireless network, and a navigation receiver, such as a global positioning system (GPS) receiver for receiving navigation signals. The navigation receiver includes a vector delay lock loop (VDLL) that receives information concerning the navigation sources, such as satellite data messages, transmitted over a common broadcast channel of the wireless network, and receives navigation signals from the navigation receiver.

Bruno Abstract

In summary, the GSM telephone of the mobile unit of Bruno would, according to the position of the Examiner, be inherently operable to determine the location of the mobile unit. The navigation receiver would therefore be unnecessary and the Bruno reference, assigned to ITT, would be non-sensical. Thus, the Bruno reference itself indicates that a cellular phone (transceiver) is not inherently operable to determine its location. This would be well understood by those of skill in the art, and the teachings of the Bruno reference are only provided as an example.

In further support of this position, as can be seen below, many objects of the invention in Bruno are to overcome issues with GPS location determination. This would simply not be necessary, if as asserted by the examiner, a cellular transceiver of the like used in a cellular telephone was inherently operable to determine its location.

Another object of the invention is to use the information concerning the location of the navigation beacon with a vector delay lock loop circuit to enable the receiver to continue to accurately track the navigation beacon when the navigation beacon is received intermittently. In a system in

which a mobile terminal may receive multiple navigation signals from different sources, including GPS and signals transmitted from cellular base stations, it is important to have an algorithm that is robust in that it computes a best estimate of position based upon the available signals. In addition, since in many terrestrial environments the signals are intermittent due to blockage, it is important to have an algorithm in which all navigation signals are cooperatively tracked. As a result, the estimate of the mobile terminal's position is more robust, as long as the minimum number (e.g., four) of navigation signals is received at least intermittently, because blockage of the navigation signal does not prevent the circuit from obtaining the position information of the satellite and terrestrial navigation sources.

Yet another object of the invention is to transmit data concerning the position of a source of a navigation signal, such as a GPS satellite, using a common broadcast control channel of a cellular telephone network. The data is for use by a vector delay lock loop circuit in tracking the navigation signal when it is only intermittently received. The data is also used to allow for rapid reacquisition of a formerly blocked navigation signal by enabling the vector delay lock loop circuit to maintain a running estimate of the signal delay even for blocked signals.

Still another object of the invention is to enable a mobile terminal to use a vector delay lock loop circuit to determine its position from a set of signals that may be transmitted by earth orbiting satellites, such as GPS satellites, or by terrestrial based cellular base stations, or a combination of satellite and terrestrial based stations, in which information concerning the position of the satellites or terrestrial stations is obtained from a cellular common broadcast channel.

Still another object of the invention is to use the communication signals in a cellular telephone network as a navigation signal. According to one aspect of the invention this can be accomplished by receiving a GPS signal at a cellular base station, and using the GPS signal to provide frequency and time references for controlling the characteristics of the cellular communications signals.

"To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

Secondly, it is disputed that a cellular telephone, even if equipped to determine the location of the phone, inherently utilizes one or more control channels in order to determine its location. Nothing in the cited references supports such an assertion.

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)

In addition, the Examiner has not specifically pointed out any teachings that Reele "is operable to use at least one *cellular control channel* to determine the location of the camera," but instead has relied upon a theory of inherent disclosure, based upon a brief reference to a list of additional patents. Nothing within Reele or the additional patents establishes or makes clear that the missing descriptive matter (that Reele "is operable to use at least one cellular control channel to determine the location of the camera,") is present within Reele. Nothing within the cited references would be recognized by one of skill in the art to *necessarily* teach that Reele "is operable to use at least one cellular control channel to determine the location of the camera."

In the rejection based upon Squibbs, the Examiner indicates that Squibbs "clearly discloses 'the cellular transceiver is operable to use at least one cellular control channel to determine the location of the camera' in the Annex A see [0140]-[157]."

However, nothing at the cited location of Squibbs, either expressly or inherently teaches "the cellular transceiver is operable to use at least one cellular control channel to determine the location of the camera." There is nothing in Squibbs regarding usage of the control channel for such a purpose. Nor is it necessarily so, which is required for it to be inherently taught by the reference according to the law on inherency. "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

Furthermore, nothing in the cited references teaches the additional claim limitation in dependent claim 51 "wherein one or more of the signals is sent over a dedicated physical control channel."

Finally, in respect to the Examiner's assertion regarding paragraphs 18-21, it is also respectfully submitted that patentable inventions very often the combination of elements or steps that are individually known in the art.

Therefore, it is kindly asserted that neither Reele nor Squibbs expressly or inherently anticipates any of the pending claims, and that all the pending claims are allowable.

Please feel free to call me at (415) 706-5909.

A handwritten signature in black ink, appearing to read "P. Mikhail", with a stylized flourish above the first letter.

Peter Mikhail